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FOREST INSECT CONDITIONS ON SEVERAL CALIFORNIA FORESTS

PATTERSON, J. E.
BERKELEY, CALIFORNIA
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FOREST INSECT CONDITIONS ON SEVERAL CALIFORNIA FORESTS

Los Padres Forest:

Figueroa Mountain, Zaca Peak and East Pinery.

Present infestation is low and conditions of stands generally good. Cruise of check plot on Figueroa established the amount of the current infestation at 16 trees per section. Infestation on East Pinery will approximate this same figure, while that on Zaca Peak is even lower.

A limited amount of control work is planned for the winter period to clean up the campgrounds and recreational areas.

Mount Pinos:

Considerable top killing of Jeffrey pine has occurred during the past 5 years. This condition has resulted from attacks of Ips and Melanophila beetles. The timber generally is ratty with a great preponderance of overmature and decadent trees. A low normal infestation of Melanophila beetles is taking out a few trees each year. This infestation will average about 25 trees per section throughout the Jeffrey pine stands. Control work is not recommended at the present time, although it may be advisable next year since an early development of the area for public utilization is contemplated.

Angeles Forest:

Big Pines Recreational Area

An incipient infestation of the Jeffrey pine beetle persists in the Jeffrey pine type, but is causing only a small amount of damage. Flathead beetles have taken out an occasional sugar pine and the engraver beetles are active in a small way in the white fir. It is estimated that the combined loss in all three species will not surpass a total of 12 trees per section. No control work is recommended.

San Bernardino Forest:

Big Bear Lake.

An active infestation is present in the Jeffrey pine stands at the west end of the lake which is causing damage on highly developed recreational areas. An area of 3000 acres is involved with an estimated infestation of 220 trees. Control is recommended for the coming winter months. An allotment of $350 is requested. This infestation is covered in detail in a special memorandum.

Little Green Valley

Another area where infestations are approaching epidemic status, and for which control work is recommended. The infested area is of 500 acres extent with a total of 60 attacked Jeffrey pine trees. An allotment of $150 is requested to cover cost of spotting and supervision.

Pawnskin and Halcomb Valley.

A high normal infestation of the Jeffrey pine beetle exists in these areas taking out about 60 trees per section. The areas are remote and at present, utilization is primarily grazing. The timber has practically no commercial value. Control is not recommended for the present.

Arrowhead Lake.

Present insect losses are low in this highly developed recreational area. Cruise of a check plot showed an annual loss of less than 8 trees per section. No control work is warranted or feasible.

Santa Anna Canyon.

This recently opened recreational area is practically free of insect infestation.

Lytle Canyon.

The damage to alder trees by the alder leaf beetle, formerly prevalent in this canyon has largely cleared up due to the lessened activity of this defoliator. The 1937 feeding of the smaller broods was confined to the tops of a few trees in the upper end of the canyon, and very little damage has resulted.

Idyllwild area.

Conditions following the control work of last winter and spring are very satisfactory in the pine stands of this popular recreational region. This current infestation is negligible on all areas controlled and is subnormal on all other areas. No control work is recommended for the present.

Cleveland Forest:

Corte Madera and Pine Valley.

Present insect losses are negligible with scarcely an infested tree visible. Conditions indicate no early change in this status.

Lagunas Area.

Flathead beetles continue to be a serious problem in the Jeffrey pine stands of this popular recreational area. The present infestation is disturbingly high with a pronounced tendency toward grouping, indicating an aggressive character which may result in greatly increased losses. An area of 3000 acres is involved, with an estimated infestation totaling 2000 trees. Early control work is recommended and an allotment of $300 is proposed for spotting infested trees and supervision of E.R.A. control labor. A separate memorandum has been submitted on this project.

Palomar Mountain.

Conditions on this mountain are subnormal with a negligible amount of losses of last season's occurrence. No control work is recommended.

Stanislaus Forest:

Only a cursory examination of this forest has been possible during the past season. A detailed survey is planned for the spring period. However, the little time spent on the forest has failed to reveal any infestation warranting control operations.

Sierra Forest:

A reconnaissance survey was made by Struble between September 27 and 29 on the Sierra National Forest to determine the extent of insect infestations in ponderosa and sugar pine. It was found that the damage by D. brevicomis, D. monticolae, Ips and flatheads is at a very low ebb; lower in fact, than at any time during the past 10 years. It was not possible in any of the area covered, when visibility was excellent, to count more than 3 to 5 trees killed by insects. It is estimated that not over 3 infested trees to the section are present. The areas covered by this reconnaissance are:

1. Chiquito Basin
2. Shake Flat
3. Rock Creek
4. Hogue Ranch
5. Saginaw Basin
6. Cascadel Basin
7. Blue Canyon
8. Fence Meadow
9. Jose Basin

Reconnaissance surveys were made 3 weeks previous on the following areas:

1. Soquel Basin
2. Hugh Ryan Canyon
3. Harris Ranch Burn

With the exception of the Harris Ranch Burn the other two areas were much in the same condition as the areas listed. On the Harris Ranch Burn a few more trees were taken again by summer broods, but no big flareup was in evidence as was the 1936 condition. All the killing occurred within the limits of the Harris Ranch Burn and showed no evidence of spreading to unburned areas.

Signal Peak.

A sudden flareup of the mountain pine beetle occurred in 1936 in sugar pine cut-over reserve stands north of Signal Peak. This semi-epidemic persisted through the early season of 1937 with undiminished vigor and became the subject of a special survey made by Struble and Byron in August. Struble recommended control work which was later carried out by WPA Blister Rust crews located on the area. Spotting and supervision of the control work was done by Struble and Byron of the Bureau. An area of 1650 acres was covered by survey and control work. A total of 16 infested trees containing a volume of 40,120 b.f. were treated. No satisfactory reason for this sudden flareup was found. However, it appeared to be of only a sporadic nature and the removal of the treated broods is expected to clear up the situation without further damaging losses.

Mono Forest:

The Jeffrey pine stands on this forest have not suffered in noticeable extent from barkbeetle depredations during the year. A few scattered trees died from beetle attacks in the vicinity of Mono Crater, but this number averaged less than 20 trees persection.

An epidemic of the Great Basin tent caterpillar suddenly appeared in the vast extent of bitter brush south of Mono Lake. The infested area comprises about 20,000 acres of prime range forage which may be completely defoliated before the epidemic completes its current cycle. The caterpillars appeared in great hordes during May and by July 1st had completed their feeding and pupated. Egg masses examined in August contained the maximum number of eggs constituting a great potential of caterpillars for the 1938 season. This infestation is under special study by the Bureau. None of the brush had yet died from effects of defoliation, but such is the end result of previous epidemics of this defoliator in these regions.

Inyo Forest:

Infestations in the pine stands were at the minimum in point of losses throughout the year. Incipient attacks by the Jeffrey pine beetle composed the small amount that was evident on the only infested areas near Mammoth and near Glass Creek.

Tussock Moth.

Epidemics of this damaging defoliator appeared on widely separated sites in white fir stands in 1935, and continued through the seasons of 1936 and 1937, yearly gaining in intensity. The 1937 broods were particularly heavy and succeeded in stripping the foliage on all the larger trees in the infestation centers. The insect has not, however, spread far from its centers of current origin. Both white fir and Jeffrey pine needles are eaten, though the latter is taken only sparingly. Many white firs have been completely denuded and there seems very small chance of their recovery. Many other trees in the centers defoliated in the early stages of the epidemic are already dead. As yet no Jeffrey pine trees have died from effects of defoliation. The combined infestation centers comprise a total area of about 1200 acres, all located in the general Mammoth watershed. This infestation has been made a special study project by the Bureau. It is planned to follow the epidemic through its complete cycle. The prevalence of wilt disease developed late in the 1937 season may presage an early decline of the epidemic.

Great Basin Tent Caterpillar.

This serious range pest appeared on the bitter brush ranges at the head of Long Valley simultaneously with its infestations on the Mono Forest. Study of its activity on the Inyo will be conducted in connection with that of the Mono Infestation.

J. E. Patterson
Associate Entomologist

Berkeley, California
November 23, 1937.

SUMMARY OF CONDITIONS, AND RECOMMENDATIONS

Forest	Area	Conditions	Recommendations
Los Padres	Figueroa	Light endemic infestation	Infested trees on campgrounds should be treated.
	Zaca Pk.	No infestations	None
	East Pinery	Negligible amount of infestation.	No control work recommended.
	Mount Pinos	Low normal infestation. Many spike top trees resulting from previous insect attacks.	Control is not possible at present. Areas should be cleaned when developed for recreational use
Angeles	Big Pines	Very low normal infestation.	No control recommended for present.
San Bernardino	Big Bear	Aggressive infestations in Jeffrey pine on recreational areas.	Infestation should be controlled and is recommended Allotment of $350 requested.
	Little Green Valley	High infestation in Jeffrey pine	Control recommended. Allotment of $150 requested.
	Pawnskin Halcomb	High infestation in Jeffrey pine.	Area is remote and used primarily for grazing. No control recommended.
	Arrowhead Lake	Infestations at low status	Control not recommended.
	Santa Anna	Infestations negligible.	Control not recommended.
	Idyllwild	Control work of last winter effective on all F. S. areas.	No further control work is recommended for the present.

	Lytle Canyon	Alder leaf beetle damage largely cleared up.	No recommendations
Cleveland	Lagunas	Aggressive and increasing infestation on recreational areas.	Control recommended. Allotment of $300 requested.
	Corte Madera & Pine Valley	Infestations negligible.	No recommendations.
Stanislaus	Forest as a whole.	Infestations static. Low for these stands.	Survey planned for spring period.
Sierra	Signal Peak	Sudden flareup of mountain pine beetle in sugar pine on reserve areas.	Control carried out last summer should establish control.
	Other areas	Infestation at low point.	No control recommended.
Mono	Whole	Infestation in Jeffrey pine subnormal.	Control not recommended.
	Mono Craters	Epidemic of the Great Basin tent caterpillar in bitter brush.	Infestation is under study by Bureau of Entomology.
Inyo	Whole	Infestations in Jeffrey pine subnormal.	Control not recommended.
	Mammoth	Epidemic infestations of tussock moth in white fir. Many trees have died.	Under special study by Bureau of Entomology.
	Long Valley	Epidemic of Great Basin tent caterpillar on bitter brush.	Under study by Bureau of Entomology in connection with infestation on Mono.